



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,677	12/28/2001	Daniel Tatarka	05788.0180	4632
7590	10/20/2004		EXAMINER	
Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P. 1300 I Street, N.W. Washington, DC 20005-3315			ARTMAN, THOMAS R	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/035,677	TATARAKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas R Artman	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 September 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4, 8, 10-12, 14-17, 19 and 21 is/are rejected.
- 7) Claim(s) 5-7, 9, 13, 18 and 20 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 December 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Claim Objections***

Claim 19 is objected to because of the following: antecedent basis is lacking for the term “inner jacket” in line 2. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Quistorff (US 6,101,304).

Regarding claim 1, Quistorff discloses a cable (Fig.2), including:

- a) a central strength member 12,
- b) a buffer tube 14 stranded around the central strength member, the buffer tube loosely housing at least one optical fiber (not shown),
- c) a first conduit 14 that receives at least one first blown optical fiber subsequent to an installation of the cable and positioned external to the central strength member, and
- d) an outer jacket 20 positioned at the periphery of the cable.

With respect to claim 2, the central strength member includes a bore configured to receive at least one central blown optical fiber.

With respect to claim 10, Quistorff's strength members have reinforcement members (col.2, line 65).

With respect to claim 11, Quistorff further discloses a first water blocking later 18 surrounding the central strength member.

With respect to claim 12, Quistorff further discloses an outer strength member 16 located substantially parallel to the central strength member and inside the outer jacket.

Claims 1, 3, 4, 8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Chastain (US 2003/0035635).

Regarding claim 1, Chastain discloses a cable (Fig. 5), including:

- a) a central strength member 42,
- b) a buffer tube 20, #1, stranded around the central strength member (p.4, par.28), the buffer tube loosely housing at least one optical fiber (not shown),
- c) a first conduit 20, #2, that receives at least one first blown optical fiber subsequent to an installation of the cable and positioned external to the central strength member, and
- d) an outer jacket 44 positioned at the periphery of the cable.

With respect to claim 3, the central strength member is solid.

With respect to claim 4, Chastain further includes an inner jacket 46 positioned inside the outer jacket and surrounding at least the central strength member and the buffer tube.

With respect to claim 8, the first conduit is positioned inside the inner jacket.

With respect to claim 11, Chastain further comprises a first water blocking layer 46 surrounding the central strength member.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain, as applied to claim 1 above, in view of Sutehall (US 2004/0037522).

Chastain does not specifically disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutehall teaches the practice of having a central strength member with a bore for just such a purpose (p.1, par.16 and p.2, par.23). The tubular central strength member is lighter in

Art Unit: 2882

weight than a solid strength member, and it allows the future addition of blown optical fibers without expanding the size of the cable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the central strength member of Chastain to have a bore configured to receive at least one central blown optical fiber because the cable is lighter in weight as a result and further allows for additional optical fibers without an increase in size of the cable.

Claims 14, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain in view of Cain (US 5,046,815).

Regarding claim 14, Regarding claim 1, Chastain discloses a cable (Fig.5), including:

- a) a central strength member 42,
- b) a first conduit 20, #3, that receives at least one first blown optical fiber subsequent to an installation of the cable and positioned external to the central strength member, and
- c) an outer jacket 44 positioned at the periphery of the cable.

Chastain does not disclose a conductor of electrical energy being included.

Cain teaches the practice of having electrical conductors in the same cable as that of optical fibers. This provides greater flexibility such that multiple communication needs, electrical and optical, are able to be accommodated in the same cable. This negates the need for installing multiple cables and allows for a more efficient, economical system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an electrical conductor in an optical fiber cable such that a simpler, economical communication system can be realized.

With respect to claim 16, the central strength member is solid.

With respect to claim 17, Chastain further includes an inner jacket 46 positioned inside the outer jacket and surrounding at least the central strength member and the buffer tube.

With respect to claim 21, Chastain further discloses a buffer tube 20, #4, that loosely houses at least one optical fiber (not shown) and is stranded around the central strength member.

Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chastain and Cain, as applied to claim 14 above, in view of Sutetall.

With respect to claim 15, neither Chastain nor Cain specifically disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutetall teaches the practice of having a central strength member with a bore for just such a purpose (p.1, par.16 and p.2, par.23). The tubular central strength member is lighter in weight than a solid strength member, and it allows the future addition of blown optical fibers without expanding the size of the cable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the central strength member of Chastain to have a bore configured to receive at least one central blown optical fiber because the cable is lighter in weight as a result and further allows for additional optical fibers without an increase in size of the cable.

With respect to claim 19, Chastain's first conduit is positioned inside the inner jacket 46.

***Allowable Subject Matter***

Claims 5-7, 9, 13, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1 and 4 and further having the first conduit positioned outside the inner jacket, as required by claim 5.

Claims 6 and 7 are indicated as allowable by virtue of their dependency.

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1, 4 and 8 and further having a second conduit for receiving at least one blown optical fiber, where the conduit is positioned outside the inner jacket as required by claim 9.

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 1, 11 and 12 and further having a second water blocking layer located between the outer strength member and the central strength member as required by claim 13.

Art Unit: 2882

The prior art of record neither teaches nor reasonably suggests a cable of the combination of claims 14 and 15 and further having the first conduit positioned outside the inner jacket, as required by claim 18.

Claim 20 is indicated as allowable by virtue of its dependency.

*Conclusion*

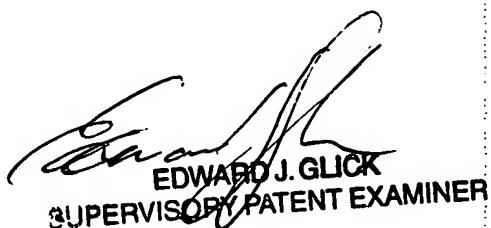
Applicant's arguments with respect to claims 1 and 14 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R Artman whose telephone number is (571) 272-2485. The examiner can normally be reached on 9am - 6:30pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas R. Artman  
Patent Examiner



EDWARD J. GLICK  
SUPPLYING PATENT EXAMINER